# Rainfall frequency and extreme forecasts

# Wet days and Wet spells Outlooks August to October 2024

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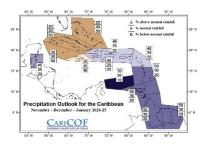




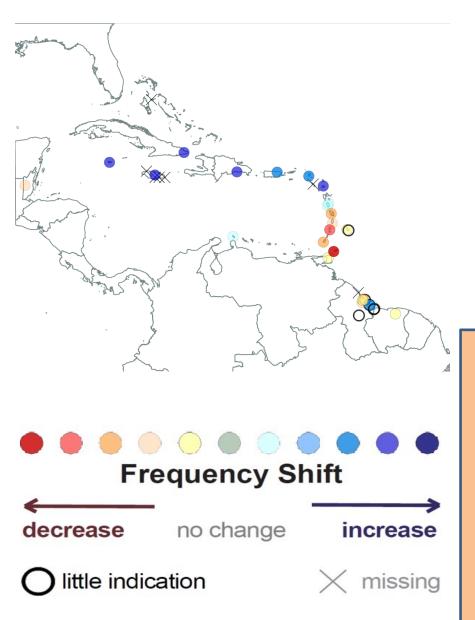
## Wet day frequency shifts

Forecast for: August to October 2024

#### Precipitation outlook



ASO 2024 Frequency of wet days



USUALLY: Out of 92 days in Aug-Sep-Oct, there are about 35 to 50 wet days in relatively flat areas of Belize and the islands, but around 45 to 60 in mountainous areas and 15 to 30 in coastal Guianas (ABC Islands: 10-20).

FORECAST: ASO may be drier than usual in The Bahamas, Cayman Islands, Cuba, and Jamaica, and at least as wet as usual elsewhere.

 More wet days than usual may be expected in the Leeward Islands and the Greater Antilles (medium confidence) with fewer than usual wet days in Barbados, Belize, Trinidad & Tobago, Windward Is. (low to medium confidence).

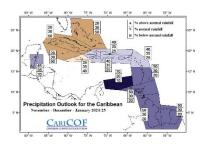
#### **IMPLICATIONS:**

- Few outdoor activity disruptions due to rainfall across the Guianas after early-August, but frequent disruptions across Belize and the islands, particularly in the Greater Antilles and the Leeward Islands.
- Surface wetness with consecutive wet days could make environmental conditions more conducive to moisture related pests but, at the same time, largely prevent wildfires.

## Wet spells frequency shifts

### Forecast for: August to October 2024

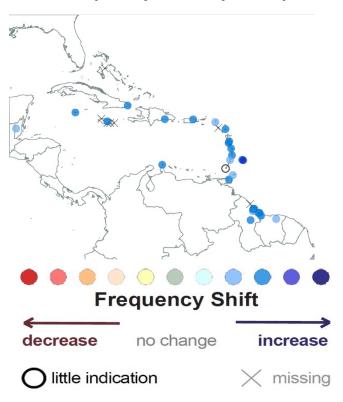
#### Precipitation outlook



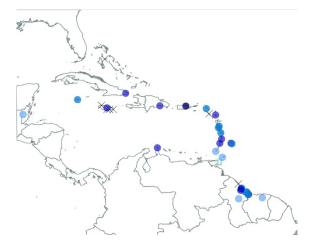




ASO 2024 frequency of 7-day wet spells



ASO 2024 frequency of 7-day very wet spells



USUALLY: Between 3 to 6 wet spells (coastal Guianas: 1-3) occur from August to October, with 1 to 4 of them ending up very wet (coastal Guianas: up to 2).

FORECAST: ASO may be drier than usual in The Bahamas, Cayman Islands, Cuba, and Jamaica, and at least as wet as usual elsewhere.

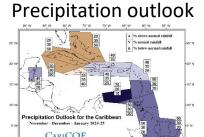
• An increase from the usual numbers of wet spells and very wet spells is expected across most of the region (low to medium confidence).

#### **IMPLICATIONS:**

- Recharge rates of large water reservoirs and soil moisture may be even faster than usual in the Lesser Antilles and coastal Guianas in view of the recurrence of wet spells.
- The chance of recurrent very wet spells translates to flood potential (1) being high in Belize and the islands; (2) moderate in the Guianas.

## **Extreme wet spells frequency shifts**

Forecast for: August to October 2024



ASO 2024 frequency of extreme (top 1%) 3-day wet spells

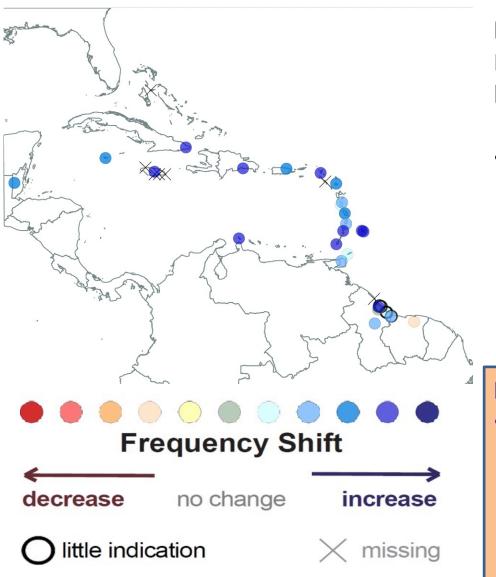
USUALLY: Up to 2 extreme wet spell occur between August to October, except in the Guianas where it is the dry season.

FORECAST: ASO may be drier than usual in The Bahamas, Cayman Islands, Cuba, and Jamaica, and at least as wet as usual elsewhere.

• An increase from the usual numbers of wet spells and very wet spells is expected across most of the region (low to medium confidence).



Very wet spells outlook



#### **IMPLICATIONS:**

• In view of the high chance of extreme wet spells in Belize and the islands, the potential for flash floods and associated hazards is expected to be high to extremely high throughout the Caribbean Islands (except the ABS Is.). A decrease to moderate potential is expected in the Guianas.

<b>August to October</b>
2024

ruguet to october									
2024	No. of wet days		No. of 7-day wet spells (20% wettest)		No. of 7-day very wet spells (10% wettest)		No. of 3-day extremely wet spells (19 wettest)		expecte %1
	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Ω X
Antigua (VC Bird)	31-45	37-51	3-6	3.5-6.6	0.9-3.9	2-6.5	0-1.1	0.1-2.3	
Aruba (Beatrix)	9-21	8-29	1.7-5.2	2.4-7.3	0.4-3.4	1.5-6.8	0-2	0.4-3	are
Barbados (CIMH)	37-50	33-52	4.3-7	4.4-7.8	2.1-4.3	2.5-5.6	0-2	0.9-3.3	none
Barbados (GAIA)	40-49	38-52	4.3-6.9	5.1-7.8	1.7-3.9	2.3-5.4	0-2	0.3-2.7	000
Belize (C. Farm)	34-50	27-51	3-6.4	3.2-6.9	1.3-3.9	1.4-4.6	0-2	0-2.6	grev
Cayman	35-46	38-56	4.3-6.9	4.9-7.7	1.7-4.3	2.2-6.1	0-2	0.3-2.5	2
Cuba (Punta Maisi)	12-27	18-41	2.6-5.2	2.9-6.6	0.9-3.4	1.8-5	0-2	0.6-2.8	
Dom. Republic (Las Americas)	27-37	29-48	3.9-6	3.9-6.8	1.8-3.7	2.2-7	0-2	0.4-3	نه
Dominica (Canefield)	45-59	44-64	3.5-6.3	3.7-9	1.7-4.5	1.9-6.2	0-2.5	0-2.3	increase
Dominica (Douglas Charles)	57-70	55-75	3.6-6.9	4-7.8	1.7-3.8	2.1-5.5	0-1	0-1.6	CC
Grenada (MBIA)	37-47	31-46	3.9-6.2	3-6.9	1.3-3.7	1.4-5.4	0-1.3	0.3-2.5	<u>.</u>
Guyana_73	11-21	8-24	0.9-3	0.8-3.3	0-2.1	0.5-2.7	0-1	0-0.2	a
Guyana (Albion)	14-28	12-35	0.9-3.6	1.3-4.3	0.4-1.7	0.5-2.2	0-1	0-0.6	blue
Guyana (Blairmont)	19-32	16-34	0.9-3	1-3.3	0-1.3	0.4-1.7	0-0		
Guyana (Charity)									light the
Guyana (Enmore)	16-31	14-34	0.9-3	1.1-3.7	0.4-1.3	0.3-1.7	0-0	0-0.2	<u> =</u>
Guyana (Georgetown)	22-38	16-37	0.4-2.6	0.9-3.5	0-1.4	0.2-1.7	0-0.1	0-0.1	
Guyana (Greatfall)	25-40	23-42	0.9-3	1.5-4.2	0.4-1.8	0.4-2.5	0-0.2	0-1.1	2
Guyana (New Amsterdam)	20-28	20-36	0.4-3	1.2-3.6	0-1.3	0.4-1.7	0-0.2	0-0.2	frequency
Guyana (Skeldon)	21-31	18-34	0.9-3	1.2-3.6	0.4-1.7	0.8-2.2	0-1	0-1.3	ממ
Guyana (Timehri)	34-44	30-43	1.7-3.4	1.8-4	0.4-1.7	0.9-2.6	0-0		fre
Guyana_Wales									2. □
Jamaica (Worthy Park)	30-47	34-62	3.4-6.4	3.7-7.8	1.3-3.9	2-7	0-2	0.5-4.1	Se
Martinique (FDF Desaix)	50-63	44-62	3.9-7.3	4.1-8.1	1.7-4.3	2.2-4.7	0-2	0.4-2.9	ecrea
Puerto Rico (San Juan)	39-51	40-57	3.4-5.6	3.4-6.4	0.9-3	2.2-5.2	0-1	0-1.8	ecr
St. Lucia (Hewanorra)	44-58	39-55	3.9-6.4	3.8-7.8	2.1-3.9	2-5.8	0-2	0.2-1.9	7
St. Maarten (TNCM)	34-49	35-59	2.8-5.6	2.6-7.5	0.9-3.4	1.4-4.4	0-1.1	0.4-2.9	is a
St. Vincent (ET Joshua)	53-63	47-59	3.4-6.9	3.5-7.5	1.7-3.5	2.4-4.7	0-2	0.3-2.7	
Suriname (Zanderij)	25-42	22-40	0.9-3.4	1-3.7	0.4-2.1	0.3-2.7	0-0.1	0-0	brown
Tobago (ANR RobinOND)	44-55	40-56	3.8-5.6	3.8-6.7	1.3-3.5	1.2-3.7	0-1.1	0-1.8	þ
Trinidad (Piarco)	37-52	29-44	3.9-5.6	3.7-6.5	1.7-3.1	1.7-3.4	0-1	0-1.4	



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